

# Solid Waste Stabilization and Disposition/Soil and Water Remediation, Groundwater and Vadose Zone/Operate Waste Disposal Facility

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High Risk Drilling



K Basin Sludge Shipping Support



Successful Completion of Transuranic Retrieval Readiness Assessment

## INTRODUCTION

This section addresses Project Baseline Summary (PBS) RL-0013, *Solid Waste Stabilization and Disposition*; RL-0030, *Soil and Waste Remediation Groundwater/Vadose Zone*; and RL-0080, *Operate Waste Disposal Facility*

NOTE: Unless otherwise noted, all information contained herein is as of the end of November 2003.

## NOTABLE ACCOMPLISHMENTS

**Transuranic (TRU) Waste Program** Completed two shipments (10 cubic meters [ $\text{m}^3$ ]) to the Waste Isolation Pilot Plant (WIPP). The waste stream profile for the mixed oxide (MOX) was approved on November 20, 2003.

**TRU Waste Retrieval:** Issued the Project Execution Plan Revision. Initiated Soil Vapor Extraction and issued the Declaration of Readiness on November 17, 2003. FH performed the Contractor Readiness Assessment from November 18-26, 2003. FH retrieved a total of 65 TRU Drums ( $12 \text{ m}^3$ ) from burial ground 218-W-4C.

**Mixed Low Level Waste (MLLW) Treatment:** Completed shipments totaling  $161 \text{ m}^3$  of 183-H Basin waste to the Environmental Restoration Disposal Facility (ERDF). A total of  $1,326 \text{ m}^3$  of 183-H waste has been disposed of at ERDF. FH dispositioned  $224 \text{ m}^3$  of MLLW in November. The field work was completed on the 183-H waste treatability study at ERDF; treated waste samples were sent to the Waste Sampling and Characterization Facility for analysis.

**Liquid Waste Processing:** The 200 Area Effluent Treatment Facility processed and disposed of 1.7 million gallons of Operable Unit UP-1 groundwater and ERDF leachate. The Basin 42 Resource Conservation and Recovery Act campaign was completed, and the Basin 43 campaign was initiated. The 300 Area Treated Effluent Disposal Facility processed and disposed of 2.8 million gallons of industrial waste water.

**Groundwater Protection Program:** Awarded a contract to decommission 89 additional groundwater wells by February 28, 2004. FH constructed five of the nine wells for the fall drilling campaign.

**200 Area Waste Site Remedial Actions:** Conducted field probe installations on November 14, 2003, in BC Cribs area (216-B-58 plus 216-B-26 Trenches). Geophysical logging at both sites was completed on November 3, 2003.

## ISSUES (AS OF DECEMBER 8, 2003)

**TRU Program Acceleration:** DOE-RL and DOE-HQ are evaluating a plan to move the nondestructive assay (NDA) unit, the nondestructive examination (NDE) unit, and the Head Space Gas Sampling (HSGS) Accelerated Processing Line (APL) units to the Nevada Test Site in mid-January of 2004. Loss of these units will significantly impact waste characterization and WIPP shipping plans, and will result in increased TRU Program costs to meet current shipping commitments. Plans for mitigating the impact include:

## ISSUES, CONTINUED

- Both NDA and NDE units are operational, but their certification has not been received from the Carlsbad Area Field Office (CBFO) due to a delay at the CBFO in submitting the audit report to the State of New Mexico for approval. This certification is not expected before the end of January 2004, which will preclude eight planned shipments of APL-processed waste during the December 2003 through January 2004 timeframe.
- The HSGS unit is in place in the Central Waste Complex. The CBFO audit for this unit was completed on November 13, 2003. Certification of the unit is expected by the end of January 2004. Operation of this unit will significantly increase the waste characterization throughput. Shipment of waste to WIPP, however, will not be possible until the audit report from the September 11, 2003, APL NDA/NDE audit is approved by the State of New Mexico. This approval is not expected prior to the end of January 2004.
- Accelerate the certification of the Plutonium Finishing Plant MOX residue waste stream. The waste stream has been approved by CBFO, and the first MOX shipment was completed on December 2, 2003. Five additional shipments are now planned before the end of January 2004. Characterization work for an additional 30 MOX shipments is scheduled to complete by mid-February 2004.
- Obtain our *S3000 (Solids)* Waste Summary Category certification to allow shipment of approximately 600 Ash Pipe Overpack Containers (POCs). Successfully completed the final audit for this certification the week of November 3, 2003. Receipt of *Solids* certification is projected in mid-January 2004, which will allow shipment of these POCs (approximately 21 shipments).

## FY 2004 FH FUNDS VS. FORECAST (\$000)

	FY 2004 Anticipated Funding w/Carryover	FY 2004 Fiscal Year Spend Forecast	Variance
RL-0013 Solid Waste Stabilization & Disposition	\$ 143,993	\$ 143,193	\$ 800
RL-0030 Soil & Water Remediation, Groundwater/Vadose Zone	\$ 37,295	\$ 36,967	\$ 328
RL-0080 Operate Waste Disposal Facility	\$ 3,984	\$ 3,984	\$ 0
<b>Total</b>	<b>\$ 185,272</b>	<b>\$ 184,144</b>	<b>\$ 1,128</b>

## FY 2004 SCHEDULE/COST PERFORMANCE (\$000)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0013 Solid Waste Stabilization & Disposition	22,620	28,917	19,662	6,297	28%	9,255	32%	144,943
RL-0030 Soil & Water Remediation, Groundwater/ Vadose Zone	5,462	5,173	4,375	-289	-5%	799	15%	37,731
RL-0080 Operate Waste Disposal Facility	436	204	397	-232	-53%	-192	-94%	3,248
<b>Total</b>	<b>28,518</b>	<b>34,294</b>	<b>24,434</b>	<b>5,776</b>	<b>17%</b>	<b>9,861</b>	<b>29%</b>	<b>185,922</b>

NOTE: Numbers are rounded to the nearest \$K.

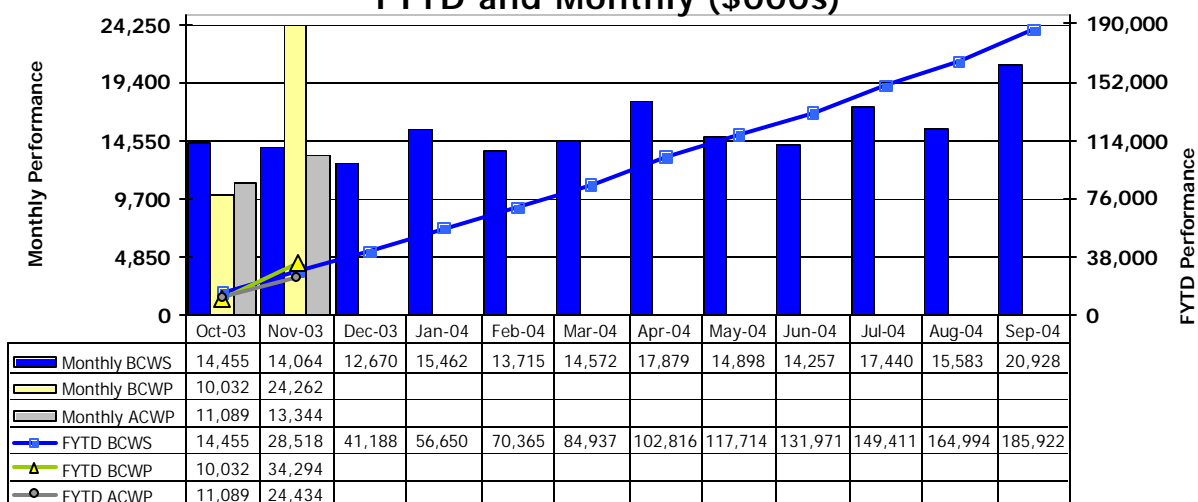
## FY 2004 SCHEDULE/COST PERFORMANCE, CONTINUED

**Schedule Performance:** The PBS RL-0013 favorable schedule variance of \$6,297K/28% is primarily the result of WIPP waste volume shipped being well ahead of plan due to acceleration initiatives started last spring. These are offset by delays with receipt of K Basin sludge at T Plant; delays in the 200 Area Liquid Effluents waste water processing due to higher than expected solids concentrations, which caused longer processing times and increased the number of filter changes and failure of the Liquid Effluent Retention Facility Basin 42 pump; and TRU retrieval is three months behind schedule due to delays in the issuance of the Safety Evaluation Report (SER) and the requirement for an Independent Verification Review prior to the scheduled Readiness Assessment. Retrieval activities were initiated in October.

**Cost Performance:** The PBS RL-0013 favorable cost variance of \$9,255K/32% is primarily the result of being ahead of plan on WIPP shipments with performance for costs incurred in FY 2003 applied in November. This is offset by the continuation of K Basin sludge preparation activities at T Plant; and TRU retrieval proceeding with emerging workscope to adhere to the new Safety Basis and SER Requirements, including the new Drum Restraint system fabricated in October and November. The 200 Area Liquids Effluents costs were still incurred during the plant downtime including extra maintenance to correct mechanical problems.

The PBS RL-030 favorable cost variance of \$799K/15% is primarily the result of Closure Services not placing new contracts due to continuing resolution.

### Performance Analysis FYTD and Monthly (\$000s)



## MILESTONE ACHIEVEMENT

Number	Milestone Title	Type	Due Date	Forecast Date	Status/Comment
M-13-00N	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	TPA	12/31/2003		On Schedule
M-24-00O	Install RCRA Groundwater Monitor Wells at Rate of up to 50 in CY 2003, if required	TPA	12/31/2003		On Schedule
M-13-00N	Submit 1 200 NPL RI/FS (RFI/EMS) work plan for the 200-UR-1, unplanned releases	TPA	12/31/2003	6/30/2004	TPA change package approved for June 30, 2004.
M-26-07A	Submit Evaluation of Status of Development of Tritium Treatment Technology	TPA	3/31/2004	3/31/2004	On schedule
M-26-01N	Submit Annual Hanford LDR Report	TPA	4/30/2004	4/30/2004	On schedule
M-016-66	Initiate Intermediate Design and Authorization Safety Analysis for Remedial Actions at the 618-10 and 618-11 Burial Grounds	TPA	9/30/2004		On Schedule
M-91-12A	Treat 240 Cubic Meters by 12/31/2004	TPA	12/31/2004	TBD	Letter of completion submitted to RL (treatment equivalency)